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Published in:
Occupational Medicine-Oxford

DOI:
[10.1093/occmed/kqt033](https://doi.org/10.1093/occmed/kqt033)

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Document Version
Publisher's PDF, also known as Version of record

Publication date:
2013

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Schreuder, J. A. H., Roelen, C. A. M., van der Klink, J. J. L., & Groothoff, J. W. (2013). Characteristics of zero-absenteeism in hospital care. *Occupational Medicine-Oxford*, 63(4), 266-273.
<https://doi.org/10.1093/occmed/kqt033>

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Characteristics of zero-absenteeism in hospital care

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Background	Literature on sickness presenteeism is emerging, but still little is known about employees who are never absent from work due to injuries or illness. Insight into the determinants and characteristics of such zero-absentees may provide clues for preventing sickness absence.
Aims	To investigate the characteristics of zero-absentees, defined as employees without sickness absence over a period of 5 years.
Methods	A mixed-method qualitative study comprising semi-structured interviews and focus groups for which Azjen and Fishbein's theory of planned behaviour was used as a framework. Zero-absentees working in hospital care were invited for semi-structured interviews until saturation was reached. The results of semi-structured interviews were validated in two focus groups.
Results	Of 1053 hospital employees, 47 were zero-absentees of whom 31 (66%) agreed to participate in the study. After 16 semi-structured interviews, no new insights or information were gathered from the interviews. The remaining 15 employees were invited to two ($n = 8$ and $n = 7$) focus groups. Personal attitudes and self-efficacy were more important in zero-absenteeism than social pressures of managers, colleagues or patients. Zero-absentees were found to be intrinsically motivated to try attending work when ill.
Conclusions	In the present study population of hospital employees, we found indications that zero-absenteeism and sickness presenteeism might be different types of work attendance. Managers should realize that zero-absentees are driven by intrinsic motivation rather than social pressures to attend work.
Key words	Focus groups; health care; qualitative research; sick-leave; zero-absenteeism.

Introduction

There is a large body of knowledge about the determinants of sickness absence, while research on work attendance is only beginning to emerge in the literature. Determinants of work attendance have been found in one's personal background as well as in work-related variables [1]. Dellve *et al.* reported that one-third of 3275 employees working in the service sector were work attendees in the sense that they took no sick-leave over a period of 1 year [2]. In The Netherlands, the 1 year work attendance rate is 37.4% in health care and 38.2% in hospital care [3].

Dellve *et al.* also showed that 1 year work attendance is an imprecise measure, because it does not discriminate

between attendance at work when well and when unwell [4]. Work attendance when unwell is usually referred to as presenteeism. A third of the employees in a stratified subsample of 3801 employees of the Swedish workforce had worked two or more times during the preceding year despite feeling unwell [5]. More than 70% of a random sample of 12 935 employees of the Danish workforce reported working through illness at least once during a 12 month period [6]. Thus, sickness presenteeism seems to be more common than sickness absence, and the costs of productivity losses due to performance below par might even be higher [7,8].

Presenteeism is associated with work-related demands and person-related demands [5]. Work-related determinants of presenteeism include difficulties in staff

replacement, conflicting job demands, work pace and pressure and workload. Having a supervisory role and/or working >45 h per week and the relationship with colleagues were also found to increase the likelihood of sickness presenteeism [6]. Personal (financial) circumstances and attitudes such as low assertiveness (i.e. difficulties in saying 'no') and being overcommitted to work lead to higher levels of presenteeism [5,6].

Johansson and Lundberg (2004) proposed that two dimensions, adjustment latitude and attendance requirements were associated with sickness absence and sickness attendance [9]. Work adjustment latitude includes the opportunities individuals have to reduce work efforts, for example by choosing easier work tasks or working at a slower pace. Attendance requirements result from the negative consequences of being away from work that can affect the individual, teammates or third persons such as patients. This implicates that going to work or staying off work is, at least partially, a type of social behaviour.

Azjen and Fishbein's theory of planned behaviour is a generally accepted theory to explain social behaviour [10]. The theory states that personal attitudes, social context and self-efficacy determine someone's intention to change a certain behaviour (Figure 1).

The theory of planned behaviour has been used in occupational health research [11] and may explain why some people report sick frequently, while others are zero-absentees in the sense that they never report sick. The theory of planned behaviour was used as a framework in this mixed-method qualitative study to explore the characteristics of zero-absentees.

Methods

The study population consisted of 1053 employees working in a regional Dutch hospital. Employees who

had not reported sick in the period from January 2006 to December 2010 were eligible for this qualitative study and were invited for the study. They were informed about the aim of the study and the benefits of its potential outcomes (Figure 2). Random numbers were assigned to the participants by using random number tables. Subsequently, participants were ordered from the lowest random number to the highest. Participants with odd rankings were selected for semi-structured interviews and participants with even rankings were assigned to one of two focus groups.

The semi-structured interviews started with the key question: 'What makes you a zero-absentee?' The further directions in the interviews were guided by the zero-absentees' answers and individual experiences [12]. Azjen and Fishbein's theory of planned behaviour provided the framework for a topic guide for questions about personal attitudes, social context and self-efficacy. All interviews were performed by the same moderator and lasted ~50 (range 40–65) min. After each set of four interviews, the interviewer and researchers discussed the results and grouped the information in key themes. Saturation was concluded if no new key themes had occurred from the next set of four interviews.

Focus group meetings are usually performed to gather information and share perspectives in a group discussion without the pressure to reach consensus. An important asset of focus group discussions is that participants interact with each other and yield extra information in doing so. The key themes occurring from the semi-structured interviews were used as input for the focus groups. Focus group participants were encouraged to develop or reject the concepts and ideas from the semi-structured interviews, which is a method of respondent validation [13]. Respondent validation is common in qualitative research to assess the reliability and validity of results by seeking participants' verification [14]. Both focus groups

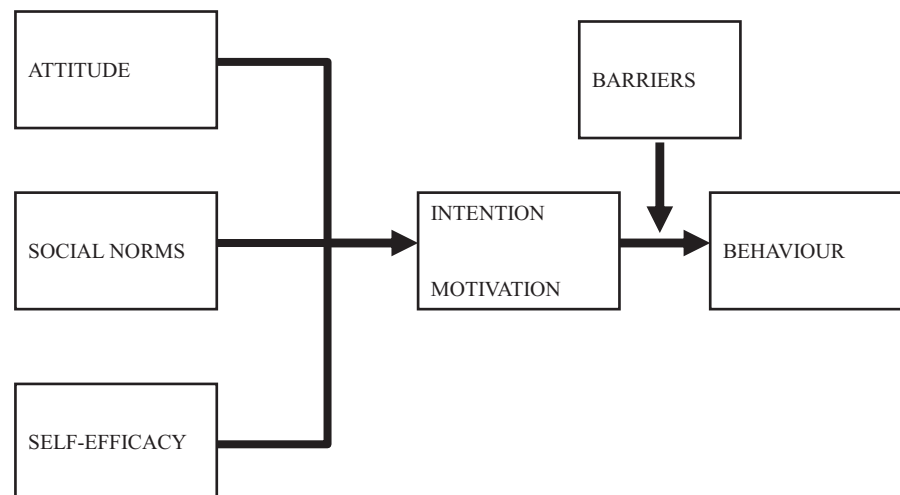


Figure 1. The model of planned behaviour.

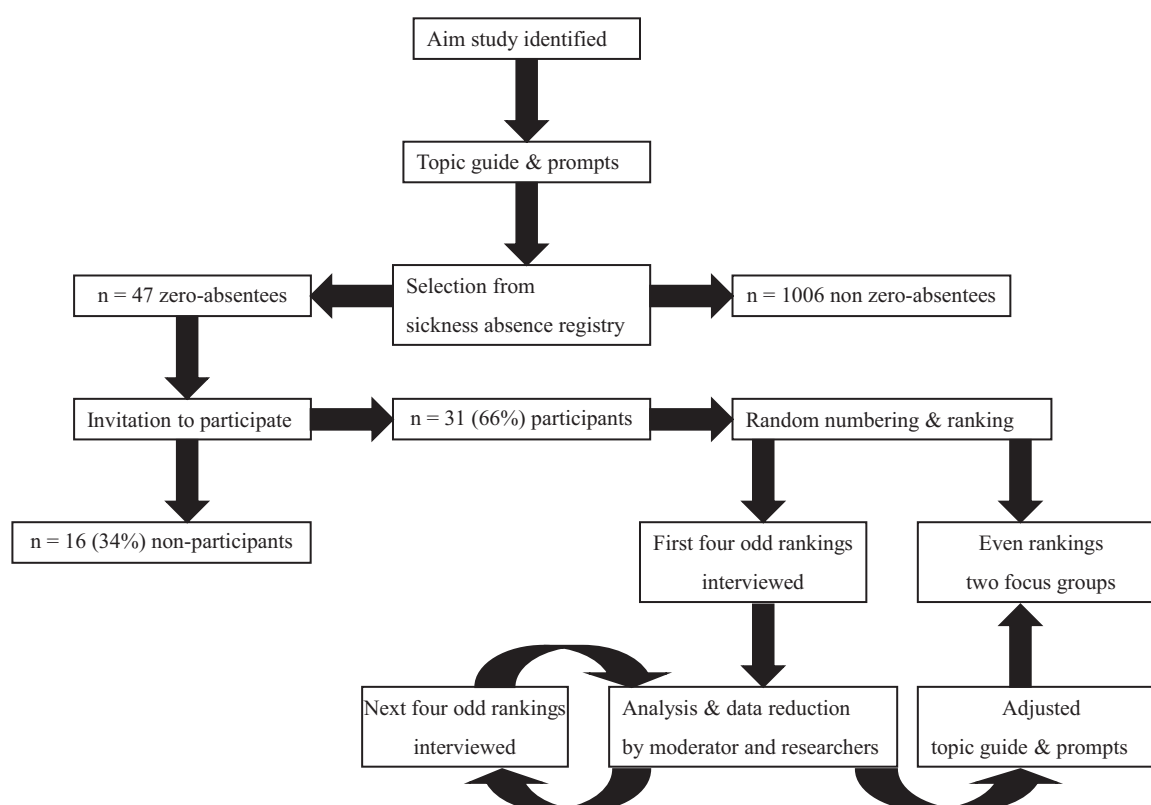


Figure 2. Flow chart of the study design and procedure.

were performed by the same moderator, who had also performed the semi-structured interviews. The moderator was not familiar with the hospital organization, but had been a manager in occupational and medical insurance settings, and was an experienced coach in behavioural management. The focus groups lasted 55 and 70 min, were taped and transcribed verbatim. Key themes were marked with a series of codes and the codes were grouped according to the concepts of the theory of planned behaviour [10].

The Medical Ethics Committee of the University Medical Center Groningen advised us that ethical approval was not necessary because the Medical Research Involving Human Subjects Act did not apply to the study.

Results

A total of 47 employees (43 women and four men) fulfilled the inclusion criteria and 31 zero-absentees agreed to participate (Figure 2). The two focus groups had eight and seven participants.

Participating zero-absentees were 30 women and one man, had a mean (standard deviation) age of 47.1 (9.1) years and worked an average of 24.8 (6.8) h/week as nurses (81%), nurse assistants (10%), lab assistants (6%) or administrator (3%). Table 1 shows that there were no differences in age, gender, job, work hours/

week and tenure between interviewees and focus group participants.

The first set of four semi-structured interviews yielded 100% new information, the second set 10% and the third set 5%. No new key themes emerged in the fourth set of interviews. Hence, the interviewer and researchers decided that saturation was reached and no further interviews were necessary.

Interviewees mentioned good health, upbringing and satisfaction with work as most important factors associated with their zero-absenteeism (Table 2). Furthermore, they mentioned optimism/positivism, goal achievement and determination as factors for being a zero-absentee. 'What I learned (from parents) was to be positive, it will always turn out better than expected.' 'Positive thinking helps me to be less absent.' Interviewees stated that they were healthy and never felt so ill that they had to stay off work. 'Actually I just feel healthy, I am never ill.' 'I find healthy living very important and take care of myself, that's why I feel healthy.'

Going home before ending the work shift happened sometimes if complaints worsened and became too serious to continue working. Most zero-absentees judged that attending work was feasible and meaningful despite their health complaints. None of the zero-absentees in this study felt that complaints negatively affected their productivity at work: 'Having complaints does not mean it impacts my work (...) when it does I would decide to go home but

Table 1. Population characteristics

	Interviews (<i>n</i> = 16)	Focus groups (<i>n</i> = 15)	Analysis
Age in years, mean (SD)	47.3 (9.7)	46.9 (8.7)	<i>P</i> = 0.89 ^a
Gender, <i>n</i> (%)			
Women	15 (94)	15 (100)	<i>P</i> = 0.52 ^b
Men	1 (6)	0	
Job, <i>n</i> (%)			
Nurse	12 (75)	13 (87)	<i>P</i> = 0.34 ^b
Nurse assistant	1 (6)	2 (13)	
Lab assistant	2 (13)	0	
Administrator	1 (6)	0	
Hours/week, mean (SD)	25.2 (6.3)	24.4 (7.6)	<i>P</i> = 0.75 ^a
Tenure in years, mean (SD)	21.0 (8.6)	20.3 (7.4)	<i>P</i> = 0.80 ^a

^a*t*-test for independent samples.^bFisher's exact test.**Table 2.** What makes you a zero-absentee?

	Interviews (<i>n</i> = 16) <i>n</i> (%)	Focus groups (<i>n</i> = 8 and <i>n</i> = 7)
Good health	13 (81)	^a
Upbringing	8 (50)	^a
Job satisfaction	4 (25)	^a
Team	4 (25)	^a
Optimism/positivism	3 (19)	^b
Work adjustment latitude	1 (6)	^a
Supervisor	1 (6)	^c
Other	4 (25)	^c

^aMentioned by four or more participants.^bNot mentioned.^cMentioned by from one to three participants.

that has never happened to me.' 'Because of my experience I know how to manage my task in the team even when I don't feel well.' 'When you are ill you always can mean something for your patients or colleagues.' 'That's just me, being productive even when I do not feel well.'

In the interviews, five nurses and one administrator mentioned chronic medical conditions, particularly depression and low back pain; 10 interviewees (eight nurses, one lab assistant and one administrator) mentioned having suffered stressful life-events. Interviewees found themselves self-efficacious in coping with these problems. 'I really pay a lot of attention to how I feel (...) when I am depressed I go to a doctor to ask for treatment (...) then I can keep myself in balance and do not need sick-leave.' When confronted with stressful life events, interviewees actively sought instrumental support asking for guidance and coaching rather than emotional support in terms of comfort and understanding. 'When my dad was terminally ill, I agreed with the team to leave my work earlier so that I could spend time with my dad (...) I started swimming to make sure I stayed in good physical condition.'

When barriers and setbacks occurred, interviewees showed their creativity in exploring the opportunities to attend work. 'When I had back pain and could not bend, I told my patients to pick things up themselves or ask my colleague and they dropped a lot less. Another interviewee said: 'I had an acute infection in my legs (...) it was holiday time so then you do not find it easy to replace someone (...) I put wet clothes around my legs to cool down and put supportive pantyhose on (...) when my legs got worse I went to the dermatologist during my shift, after putting tape around my legs it went fine.'

All participants in the focus groups agreed that parental education was the most important basis for personal norms and beliefs about work attendance and sickness absence. They often mentioned that their father or both parents were self-employed, for example in farming or horticulture, and rarely had days off work due to illness. As children, the participants were taught by their parents to go to school in spite of not feeling well. This was regarded as the basis for their current zero-absenteeism (Table 3).

Some focus group participants, especially the older ones, added that these norms and beliefs developed over time. 'In the first part of my career I sometimes thought about calling in sick when I did not feel well (...) I do not do that anymore, because my norms have changed over the years.' Differences in norms between older and younger employees were attributed to different views on the meaning of work career and private life. Young employees combine caring for children with having a job and the older employees thought they would prefer to take sick-leave for example when a child is ill or when there are domestic problems. 'Taking sick-leave because of a sick child is ridiculous (...) you ought to arrange good daycare (...) you have a responsibility towards your work (...) I assume that younger colleagues think differently about this.'

In the focus groups, social norms, in terms of pressure from the supervisor or team members to attend work, were

Table 3. Results from interviews and focus groups

Questions and prompts	Interviews (<i>n</i> = 16)	Focus groups (<i>n</i> = 8 and <i>n</i> = 7)
Attitudes		
What would hold you back from taking sick leave when you think about staying home from work?	<p>'You can only call in sick when you are not able to function.'</p> <p>'If you have a job, you have to be at your work, you cannot take sick-leave when your children are sick.'</p>	<p>'You do not call in sick because of snow or icy roads (...) you get paid for your job, so you go to work when you are able to.'</p> <p>'You have to be able to organise things at home and if you do not succeed it would be better if you did not have a job.'</p>
Prompts: model behaviour, status, supervisor, teammates, patients, private circumstances, personal feelings	<p>'To call in sick is the result of your background and upbringing (...) it is actually the example you get from your parents.'</p> <p>'Work is important for me (...) I like what I do and I feel satisfied and content with my job and my team.'</p> <p>'For me team spirit makes the difference, when I would work in a less enthusiastic team I would be less motivated to go to work.'</p>	<p>'I was raised with the ethos: not to complain, get over it and move on.'</p> <p>'I always like my work (...) after my holiday I always look forward to going to work again.'</p> <p>'Feeling responsible for your work is part of your professional profile as a nurse.'</p>
Social norms and context		
With who do you discuss your decision when to take sick leave, look for an alternative or do additional work? Who can influence your decision to call in sick or go to work?	<p>'I do not discuss my decision to call in sick or go to work with anybody, only with myself.'</p> <p>'When I call in sick I am sick, my supervisor is of no influence.'</p> <p>'When I had thrombosis teammates told me to go home (...) I did not feel sick so I stayed at work.'</p>	<p>'Sometimes my partner asks me why I do not call in sick, but he knows I will go to work.'</p> <p>'Feeling committed to the team is important (...) it makes me take sick-leave less easily.'</p> <p>'For me a positive driver to go to work and not take sick leave is respect from my colleagues and patients.'</p>
Prompts: partner, parents, friends, supervisor, colleagues, doctor	<p>'For me, knowing I did a good job is important (...) I know teammates appreciate my work although they do not tell me all that often.'</p>	
Self-efficacy		
What makes you go to work while others call in sick?	<p>'I keep rhythm that's important. (...) even a level lower, but you can go on.'</p> <p>'I have a lot of perseverance (...) I have a goal and work on it, keep an overview (...) that's how I cope with all sad things in life.'</p>	<p>'When there are problems I know I can cope with it (...) and find solutions.'</p> <p>'In a period of stress at home you can inform your colleagues and ask them to pay attention (...) then you can still do your work and avoid making mistakes.'</p>
Prompts: confidence, perceived abilities, intentions to complete tasks or reach goals	<p>'When the same complaints occur you learn how to deal with it (...) the first time you call in sick (...) now I do not do that anymore (...) you are able to do your work.'</p> <p>'I always try to see the other side of things, from the negative also find the positive side, I am easy going and I learned to let things go.'</p> <p>'Things do not distress me so quick in work (...) when not feeling well I take an Aspirin and then I don't have to call in sick.'</p>	<p>'My experience is that you feel worse when you stay at home, so you better go to work (...) it gives you energy when you succeed finishing your shift.'</p> <p>'When you have a physical heavy job, it is your responsibility to stay in a good condition and prevent health conditions that limit your physical functioning.'</p> <p>'I keep in mind when I have to work the next day, then I do not go out until late (...) I want to be fit for my patients.'</p>

The table shows questions, prompts and themes of interviews and focus groups.

^aMentioned at least by from one to three participants.

^bMentioned by four or more participants.

not mentioned spontaneously. When asked, focus group participants said they did not perceive social pressures to attend work. Zero-absentees even perceived a team norm of work absence rather than work attendance when colleagues are ill. Some participants mentioned esteem and respect from teammates and patients or commitment to the team as motivations to attend work. In comparison to other teammates, focus group participants thought that they were less susceptible to stress at work, had better balance between work and personal circumstances, were more creative and tenacious in finding solutions to solve barriers to attend work and were more resilient when setbacks occurred. 'When they told me my arthritis could get worse and being a nurse would become too heavy, I decided to start exercising every day and visited a specialized physiotherapist (...) I reduced my contract and started a training for nurse specialist, which is an advisory function and less physically demanding.'

Discussion

The results of this qualitative study show that personal attitudes and self-efficacy were more important than social norms in terms of motivation to attend work. Zero-absentees were personally motivated to attend work rather than from the pressure of supervisors and teammates or responsibility towards their patients.

The strength of the study was its mixed-method design, combining semi-structured interviews and focus group meetings. Semi-structured interviews allowed individuals to respond with complete anonymity, but a disadvantage was that individuals did not receive feedback from others. Feedback of others assists reflective practice, and individuals may elaborate on their values, beliefs, ideas and viewpoints. This disadvantage was overcome by the focus group meetings allowing participants to discuss the issues raised. Thus, the mixed-method design combined the advantages of semi-structured interviews and focus groups to provide insight into the characteristics of zero-absentees. However, moderator bias may have occurred, because the same person performed the interviews and focus groups. The moderator might have gained ideas about zero-absenteeism from the interviews, which may subsequently have influenced the course and discussions in the focus groups. We tried to deal with this type of bias by researcher supervision, i.e. one of the researchers attended the focus groups and prompted the moderator to avoid giving opinions and to stick to the original interview transcripts to ensure that themes reflected the actual data and not the interpretation of the moderator [13]. The advantage of the single same moderator was that the constructs of the theory of planned behaviour were used consistently in interviews and focus groups, which facilitated the transition of key themes from interviews to focus groups for respondent validation.

This is the first study that has investigated zero-absenteeism in terms of uninterrupted long-term work attendance over a period of 5 years. Until now, only 1 year work attendance was examined, which is an imprecise measure for work attendance [4]. All employees worked in the same organization and were therefore comparable with regard to work conditions and organizational sickness absence practices, which is important because sickness absence can be regarded as a social exchange process influenced by organizational cultures [15–17]. The disadvantage of including zero-absentees working at one organization is that the results may not generalize to other working populations. However, the aim of this mixed-method qualitative study was not to find results that are widely applicable, but to gain detailed insight into the characteristics of zero-absentees and the mechanisms underlying zero-absenteeism. The results of this study should be validated by further quantitative research in larger working populations.

Although the zero-absentees in this study experienced good health, there is no reason to believe that they are healthier than the hospital employees who were absent from time to time. However, when zero-absentees in this study were ill, they never felt sick enough to stay off work, particularly due to their parents' influence and upbringing. In this study, zero-absentees were driven by personal attitudes and self-efficacy to go to work when having health complaints. The phenomenon that employees go to work despite feeling ill is called sickness presenteeism. Aronsson *et al.* showed that >50% of a random sample of Swedish employees reported sickness presenteeism, particularly employees working in health care and education [18]. Health care workers and teachers might experience pressure to attend work, because they feel responsible for patients or children. Ashby and Mahdon found that personal work-related stress and perceived workplace pressure predicted higher rates of sickness presenteeism [8]. However, the participants in the present study seem to be driven by intrinsic motivation to attend work rather than workplace pressures.

It has also been reported that presenteeism was associated with impaired performance [5–7,19–21]. Zero-absentees in this study perceived no impaired performance when working while unwell, although it would have been informative to ask supervisors and teammates about the productivity of zero-absentees at work when ill. Zero-absentees might find working despite being ill meaningful, because they were able to choose easier work tasks. In terms of the illness flexibility model, they used their work adjustment latitude to facilitate work attendance rather than giving in to work attendance requirements.

Possibly, the individuals who are present despite sickness as a consequence of pressures to attend work or who force themselves to do their usual work when ill are at risk of poor health [19,20] and an increased risk

of future sickness absence [20–22]. Although they were sometimes sickness present, zero-absentees in our study did not report themselves sick over a period of 5 years. They believed health complaints could be prevented by a healthier lifestyle. Furthermore, zero-absentees in this study felt confident and self-efficacious in managing health complaints and adjusting work tasks to facilitate work attendance when ill.

Though the social context and social norms have previously been found to be important in sickness presenteeism, work pressures were not mentioned by the zero-absentees in this study as a reason to attend work. This is an important finding for supervisors, who usually play an important role in managing sickness absence. Nyberg *et al.* found that inspirational leadership was associated with fewer short episodes of sickness absence in the Swedish workforce [23]. Schreuder *et al.* found that effective leaders had lower numbers of both sickness absence days and short episodes of sickness absence in their teams [24]. The current results show that supervisors may not have as important a role in managing work attendance of zero-absentees, because their work attendance seems to be driven by intrinsic rather than extrinsic motivation.

Zero-absentees in this study were intrinsically determined to attend work and actively sought solutions for barriers and setbacks hindering work attendance. The researchers felt that self-efficacy alone could not explain the zero-absentees' positivity, their perseverance when setbacks emerged and their creativity in accommodating work. These capacities refer to a construct called positive psychological capital [25]. Now that there is a large body of knowledge about risk factors increasing sickness absence, it would be interesting to investigate how zero-absentees and their positive psychological capital can be used to reduce sickness absence levels [26,27].

Key points

- In this study, personal attitudes and self-efficacy appeared to be more important for attending work than the social context.
- Zero-absentees were intrinsically motivated to attend work when ill and less influenced by pressures or responsibilities towards supervisors, teammates or patients.
- Zero-absentees provided their colleagues with good models of staying healthy, achieving balance in their lives and preventing work-family interference.

Conflicts of interest

None declared.

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